

CLAIMS

1. A radio communication device having a resource efficient content management
5 system, comprising:
 - a memory;
 - at least one pack that includes an image file that contains data; and
 - a pack manager loaded in the memory, the pack manager having a pack loader,
unloader and a master pointer table, wherein the pack manager is used for loading
10 and unloading the at least one pack into and out of the memory, and using the
master pointer table for keeping track of the location of the at least one pack.
2. A radio communication device as defined in claim 1, wherein the at least one pack
contains a header portion, an info portion and a data portion, wherein the header
15 portion comprises an identifier.
3. A radio communication device as defined in claim 2, wherein the identifier in the
header portion is unique to each type of pack and helps identify the pack.
- 20 4. A radio communication device as defined in claim 3, wherein the header portion
also includes information on a size of the at least one pack.
5. A radio communication device as defined in claim 3, wherein the header portion
includes information on the version of that at least one pack.

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6. A radio communication device as defined in claim 2, wherein the info portion includes information regarding a size of data located in the data portion.
7. A radio communication device as defined in claim 6, wherein the info portion
5 further includes a checksum which is used by the pack manager to check integrity of the data stored in the at least one pack.
8. A radio communication device as defined in claim 1, wherein the pack manager
10 further comprises an error checker that is used to check for errors in the data found in the at least one pack.
9. A radio communication device as defined in claim 8, wherein when the at least one pack is loaded into the radio communication device a checksum found in the at least one pack is checked by the pack manager to determine if the at least one
15 pack is valid or invalid.
10. A radio communication device as defined in claim 9, wherein the at least one pack can be loaded into the radio communication device over-the-air.
- 20 11. A radio communication device as defined in claim 9, wherein the at least one pack can be loaded into the radio communication device using a tethered download.

12. A radio communication device as defined in claim 9, wherein if the pack manager determines that an invalid pack has been loaded, the radio communication device will automatically request that a pack be resent.
- 5 13. A radio communication device as defined in claim 1, wherein the memory comprises a nonvolatile memory.
14. A radio communication device as defined in claim 1, wherein the memory comprises flash memory.
- 10 15. A radio communication device as defined in claim 1, wherein the at least one pack can be loaded and read without power recycling the radio communication device.
- 15 16. A radio communication device as defined in claim 1, wherein the at least one pack can be comprised of different data types, and each different data type pack has a unique identifier.

17. A method for registering at least one pack comprising an image file in a radio communication device having a pack manager, comprising the steps of:
- initializing the pack manager;
 - 5 determining if the radio communication device has a pack loaded that comprises an image file; and
 - if a pack is loaded, using an error checker in the pack manager to determine if the pack is valid or invalid.
18. A method as defined in claim 17, wherein if at least one valid pack is loaded in the radio communication device, the method further comprises:
- registering the at least one pack with the pack manager, the pack manager having a master pointer table that points to a location of the at least one pack in a memory of the device.
19. A method as defined in claim 18, further comprising the step of:
- updating the master pointer table when a new pack is loaded into the radio communication device.
20. A method as defined in claim 19, further comprising the step of:
- flagging the at least one pack loaded into the radio communication device by the pack manager as ready for runtime access if it is determined to be valid.
21. A method as defined in claim 17, wherein the pack manager includes a pack loader, a master pointer table and an error checker.

22. A method as defined in claim 17, wherein the at least one pack is loaded into nonvolatile memory located in the radio communication device.
- 5 23. A method as defined in claim 22, wherein the at least one pack can be loaded and read without power recycling the radio communication device.
24. A method as defined in claim 17, further comprising the step of:
determining a type of pack that may be loaded in the radio communication
10 device by the pack manger reading a unique identifier located in the pack.